Problem Set #5

Sonoma State University
Economics 305-Intermediate Microeconomic Theory

Dr. Cuellar

(1) Suppose that you are paying your for your own education and that your college tuition is $200 per credit hour. At that price you generally take 15 hours per semester at a cost of $3,000. Now suppose your college changes to a policy of charging $3,000 per semester regardless of the number of hours taken.

(a) How will this alter your budget line? Explain fully and show graphically.
(b) How will it affect your course load? Explain fully and show graphically.

(2) Suppose you go to an all you can eat pizza buffet in which you pay $15 and then you can consume all you want.

(a) Using an indifference curve and budget line, show your optimal consumption bundle.
(b) Discuss the equilibrium conditions at the optimal level of consumption.
(c) Would a utility maximizing consumer ever “over consume” pizza. That is would you consume pizza until it became and economic “bad?” Explain fully and show graphically.

(3) A wage increase will induce both an income and substitution effect on the hours worked of a utility maximizing consumer.

(a) Explain the substitution effect of a wage increase on hours worked.
(b) Explain the income effect of a wage increase on hours worked.
(c) Using the labor leisure model, show the effect of a wage increase on hours worked if the substitution effect dominates the income effect. Explain fully and show graphically.
(d) Using the labor leisure model, show the effect of a wage increase on hours worked if the income effect dominates the substitution effect. Explain fully and show graphically.
(e) Using the labor leisure model, show the effect of a wage increase on hours worked if the income effect and the substitution effect are of equal size. Explain fully and show graphically.
(f) What are the implications of the your answers in c-e on the shape of the labor supply curve?

(4) Assume that a parcel of land in Fresno County costs $50,000 while an equivalently sized parcel of land in Sonoma County costs $150,000. A nice house cost 200,000 to build while an average house cost $50,000. Which area will have a greater number of nice houses? Explain fully and show graphically.